

# TaMAX SKY - MORE THAN JUST A HIGH BAY

- Reliable performance in ambient temperatures -40 °C to +65 °C
- High modularity, module arrangement side-by-side and front-to-back
- Many performance variations
- Possibility to combine optics and various lighting characteristics in one luminaire
- Realistic life-span of 100,000 hours (L80B10)
- IP 65
- Unbeatable return on investment and total cost of ownership







### Primary characteristics

- For Ta -40 °C to +65 °C
- High-performance heat management of the entire luminaire
- Extreme modularity and variability: many performance variations, variable arrangement of modules, combination of various lighting characteristics in one luminaire
- LED light source and LED driver placed in separate heat sinks
- Luminaire efficacy 143,8 lm/W for Ta +50°C
- Available with an emergency module for use as emergency lighting
- IP65 enclosure rating
- Available version with front protective glass
- For installation heights from 4 to 30 meters
- Life-span of L80B10 => 100,000 hours

#### Exceptional modularity to truly and effectively illuminate your operations

Distribution of the emitted light to the illuminated area is just as important as the overall luminous flux efficacy.

We supply TaMAX SKY luminaires in many performance variations. They are composed of modules with LED chips and one optical cover. Each module can be fitted with a different optical cover. Thus we can combine various light-distribution characteristics in one luminaire.

For example, the TaMAX SKY 149 W luminaire is composed of four modules, each one of which can have its own special light-distribution characteristics. Thanks to this, the luminaire can light up basically any operation in a highly effective manner. It can be perfectly adapted to the required illuminance level, mounting height, placement or installation limitations, the technological layout of your operation, etc.

#### Luminaire heat management

The TaMAX SKY luminaire is built for reliable and long-lasting operation at ambient temperatures of  $-40\,^{\circ}\text{C}$  to  $+65\,^{\circ}\text{C}$ .

The LED power sources and LED drivers in TaMAX SKY luminaires are placed in separate boxes to prevent them from thermally affecting one another. The individual components of the luminaire also serve to cool the chips and drivers. Thus, all components in TaMAX SKY luminaires can operate with a high degree of comfort even at extremely high temperatures of the surrounding environment.

#### Several important facts

- We have designed the surfaces of the luminaire's body to remove heat properly even in heavily dusty environments.
- We've not only taken into consideration the effective surface area, but also sufficient thermal bridges to make sure heat dissipation is as quick and effective as possible
- Even the vertical ribbing located on the bottom side of the luminaire was designed and properly
  calculated to anticipate the collection of dust, moisture and other potential dirt.

## Thermal-conductive materials for LED source heat removal

Even the smallest unsealed areas between the chip and the cooling system can quickly damage the chip, Incorrect thicknesses or improper application can transform an effective thermal-conductive base into a heat barrier. Even a hundredth of a millimeter can make the difference.

For TaMAX SKY luminaires, we use thermal-conductive materials specially designed for the specific LED light source. The technological procedure of the tape application guarantees 100% adhesion and therefore the quick and continuous removal of heat from the chips.



HIGHLY VARIABLE

INDUSTRIAL LUMINAIRES

FOR HIGH OPERATING

**TEMPERATURES** 



Openings in the profile of the luminaire further heighten the efficiency of the cooling system



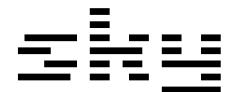
We integrate variations with higher performance into compact units



Optics and lighting characteristics can be combined freely into one luminaire







### LXXBXX - think about the long-term costs

The L80B10 life-span parameter for TaMAX SKY luminaires is equal to 100,000 hours.

- Parameter L in the code shows the decrease of the luminaire's luminous flux after 100,000 hours in a percentage. L80 means that the TaMAX SKY luminaire will have at least 80% of its original luminous flux after 100,000 hours of operation.
- Parameter B shows the percentage of luminaires that assumption L does not have to fulfill. With B10, the assumed luminous flux loss does not have to fulfill 10% of the installed luminaires. In other words 10% of the installed luminaires may suffer greater luminous flux loss for the declared time (100 000 hours).

LXXBXX's lifespan may differ according to varying temperature conditions. L80B10 of the TaMAX SKY luminaire in the value of 100,000 hours applies to Ta +65 °C.

The LXXBXX parameter is very useful for economical project assessment. In assessing the total cost of ownership, installing cheaper luminaires with a worse LXXBXX parameter will paradoxically raise the price of your project, as they will need to be replaced sooner.

#### Optical system

In TaMAX SKY luminaires, we use highly durable LED optics made by the foremost manufacturers which do not degrade over time. The transmittance of individual optics is between 92% and 96%.

In order to lower levels of glare, we use a larger number of LED chips and larger surfaces for our optics. At the same time, we sink the optical system deeper into the body of the luminaire.

TaMAX SKY luminaires can also be equipped with protective glass. We use special glass with a low iron content and the best level of transmittance on the market at 92%.

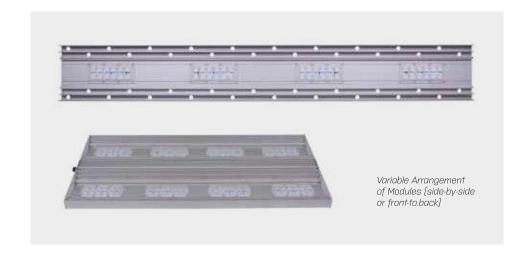
### Easy installation and maintenance

doublepower!!

industrial lighting | intelligent | efficient

Installation via a connector and the possibility of choosing how to space installation points makes mounting quicker and reduces costs of installation and maintenance. The luminaire is made to adapt to various mounting and hanging limitations.

NEED ADDITIONAL INFORMATION? JUST CONTACT US. WE'LL BE HAPPY TO GIVE YOU MORE. CALL +420 222 312 917 OR EMAIL US AT NA INFO@DOUBLEPOWER,CZ.





Phone +420 222 312 917 info@doublepower.cz www.doublepower.cz

TaMAX SKY

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INDUSTRIAL LUMINAIRES

FOR HIGH OPERATING

**TEMPERATURES** 

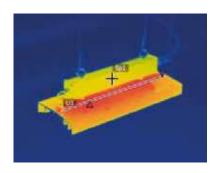


Flexibility in luminaire installation: IP68 connector and adjustable spacing of installation points





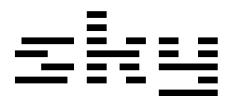
Versions with or without Front Glass Cover



We test heat management in real operation





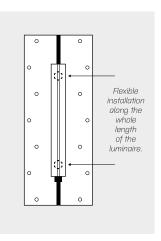


## Specification

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Versions	74,60 W / 111,90 W / 149,20 W / 186,50 W / 223,80 W / 298,40 W / 373,00 W					
Luminous Flux of the Luminaire	10 727 lm (74,60W) / 16 091 lm (111,90W) / 21 455 lm (149,20W) / 26 818 lm (186,50W) / 32 182 lm (223,80W) / 42 909 lm (298,40W) / 53 636 lm (373)					
Luminous Flux Efficacy	LED light source: 151 lm/W, Luminaire: 143,8 lm/W					
LED Light Source	CREE XP-L2					
Color Temperature	4000 K – 6500 K					
Life-time of the Luminaire	L80B10 > 100 000 hours at Ta +65 °C					
Front cover	PMMA with possibility of 3 mm hardened glass cover					
	Highl level of permeability, withnout degradation					
Body	Robust Body from Anodized Alluminium, separate body for LED driver					
	Highly Efficient Thermal Management					
	Low Operating Temperatures of all Components					
Protection rating	IP 65					
Operating Temperatures and Electronics	–40 °C až +65 °C					
	Tridonic LED Driver with Life-time more than 100 000 hours					
Optical System	System of PMMA Optics with various lighting characteristics					
	Low Glare Factor					
Other	No stroboscopic effect					
	DALI / DSI smooth control, possibility to include into a complex DALI / KNX control system					
	Fast and Easy Mounting thanks to IP68 connector and adjustable hanging points					
Manufacturer	doublepower!! s.r.o. Czech Republic					

# **Dimmensions / cm** (suspended luminaire)

	TaMAX SKY 74,6 W	TaMAX SKY 111,9 W	TaMAX SKY 149,2 W	TaMAX SKY 186,5 W	TaMAX SKY 223,8 W	TaMAX SKY 298,4 W	TaMAX SKY 373 W
Lenght (without connector)	74,8	112,2	149,6	187	112,2	149,6	187
- with unpluged connector	74,8	112,2	149,6	187	115,2	152,6	190
- with plugged connector	74,8	112,2	149,6	187	125,5	162,9	200
– with cable out	74,8	112,2	149,6	187	119,2	156,6	194
Width	20,1	20,1	20,1	20,1	48,5	48,5	55,5
Height	16,5	16,5	16,5	16,5	6,5	6,5	6,5
- including hanging rings	20,5	20,5	20,5	20,5	10,5	10,5	10,5
– including hanging rings and snap-hook	24,8	24,8	24,8	24,8	15	15	15
Weight (with unpluged connector, without hanging rings)	4,6	6,7	8,5	11,2	14,7	16,8	24,5



# **Lighting Characteristics**

